

**Appl. No. 10/717,730
Amdt. dated April 14, 2009
Reply to Office Action of January 15, 2009**

REMARKS

Applicants have received the Office Action dated January 15, 2009, in which the Examiner: 1) rejected claims 1-4 and 6-21 under 35 U.S.C. § 103(a) as allegedly obvious under Congdon et al. (U.S. Pat. No. 6,151,297, hereinafter “Congdon”) in view of Burns (U.S. Pat. No. 6,938,092, hereinafter “Burns”); and 2) rejected claim 5 as allegedly obvious under Congdon in view of Burns and further in view of Mahalingham et al. (U.S. Pat. No. 6,314,525, hereinafter “Mahalingham”).

With this Response, Applicants amend claim 1 to correct a typographical error. Based on the amendment and arguments herein, Applicants respectfully submit that all pending claims are in condition for allowance.

I. REJECTIONS UNDER CONGDON AND BURNS

Independent claim 1 is directed to a computer system that requires:

. . . a program executing on the CPU [that] reloads an offloaded connection established by the first network adapter onto the second network adapter as a result of one of a plurality of packets associated with the offloaded connection being received on the second network adapter (emphasis added).

In the Office Action dated May 16, 2008, the Examiner conceded that the emphasized portion of the limitation cited above is not found in Congdon. As a result, the Examiner turned to Burns and asserted that col. 6, ll. 36-67 and col. 7, ll. 57-67 of Burns satisfies Congdon’s deficiencies. Applicants filed an Appeal Brief on October 6, 2008, conclusively demonstrating why these portions of Burns fail to satisfy Congdon’s deficiencies. In light of this Appeal Brief, the Examiner reopened prosecution and now cites col. 7, ll. 1-29 of Burns in addition to the previously-cited portions of Burns as satisfying Congdon’s deficiencies.

Applicants respectfully submit that the Examiner is still mistaken. The relevant portions of Burns (col. 6, l. 36 – col. 7, l. 29 and col. 7, ll. 57-67) discuss

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port redundancy in reference to Fig. 2 (reproduced below for the Examiner's convenience).

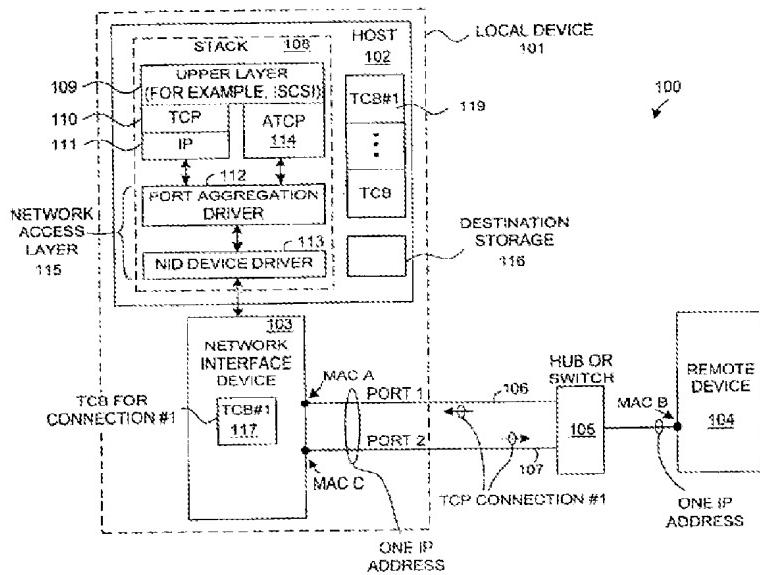


FIG. 2

In particular, Burns teaches that the network interface device (NID) 103 sends and receives data from the switch 105 via ports 1 and 2. See col. 4, ll. 13-33 and Fig. 2. Port 1 is assigned MAC address "A" while port 2 is assigned MAC address "C." Col. 7, ll. 10-13; Fig. 2. Burns notes that one of the ports may fail. Col. 6, l. 36. For example, port 1 may fail and thus may be unable to transfer data between NID 103 and switch 105. Burns teaches that the NID 103 detects such failure (col. 6, ll. 40-41) and sends a signal to the port aggregation driver (PAD) 112 indicating the failure. Col. 6, ll. 42-52.

In response to receiving this failure signal from the NID 103, the PAD 112 "chooses another of the ports of the team (port 2 in this example) to be the new 'primary' team member." Col. 6, ll. 61-67. The PAD 112 further swaps the MAC addresses of the ports, so that the current MAC address assignments (port 1 with MAC address "A" and port 2 with MAC address "C") are reversed (port 1 with MAC address "C" and port 2 with MAC address "A").

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Significantly, Burns teaches that the PAD 112 swaps MAC addresses by writing MAC “A” into the MAC address field for port 2 and by writing MAC “C” into the MAC address field for port 1. Col. 7, ll. 6-9. Burns teaches that the PAD 112 causes the NID 103 to change MAC addresses for the ports using the NDIS request function to which the Examiner cites in the instant Office Action. Col. 7, ll. 10-29. Similarly, col. 7, ll. 57-67 echo this theme of changing MAC addresses, except in this case, the PAD 112 updates the TCB 119.

Despite these teachings regarding MAC address switches, Burns certainly does not teach or even begin to suggest that a MAC address is switched “as a result of one of a plurality of packets associated with the offloaded connection being received on the second network adapter” (emphasis added), as required by claim 1. In order for Burns to teach such a limitation, Burns would have to teach that the MAC switching described in cols. 6-7 occurs as a result of the non-failed port (port 2) receiving a data packet associated with the failed port (port 1). Instead, Burns teaches that the MAC addresses are switched as a result of the NID 103’s detection of port failure and the subsequent failure signal sent to the PAD 112. There is no teaching in Burns that the receipt of a packet – any packet – precipitates MAC address swapping.

In fact, it is not even **possible** for Burns to teach the limitation in question. Referring again to Fig. 2, if port 1 goes offline and port 2 remains active, port 2 will not receive any packet intended for port 1 **until the MAC address swapping is complete**. If the MAC address swapping is already complete, then it would not make sense for a packet subsequently received on port 2 to cause the MAC addresses to be swapped. This is due to the fact that the packet is being received by port 2 in the first place **because** the MAC addresses have **already** been swapped. For the Examiner to assert otherwise would be an application of circular logic. For instance, port 1 has MAC address “A” and port 2 has MAC address “C.” Upon port 1’s failure, the MAC addresses are swapped so that port 1 has MAC address “C” and port 2 has MAC address “A.” Only after port 2 has been assigned MAC address “A” may port 2 begin receiving packets originally destined for port 1. Assume that port 2 does in fact receive a packet originally

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destined for port 1. The MAC addresses will not be swapped as a result of receiving the packet, because the MAC address have already been swapped. Thus, it is not even possible for Burns to teach the limitation in question.

Having established that Burns fails to teach the limitation in question, Applicants now turn to the Examiner's specific argument. The Examiner appears to believe that Burns teaches the limitation in question and offers the following line of reasoning for support: As a result of port 1's failure, port 2 becomes a primary port. As a result of port 2 being a primary port used to receive data, the PAD 112 swaps the ports' MAC addresses. Once the MAC addresses are swapped, packets originally destined for port 1 are now received at port 2, since port 1 has failed. As a result of the MAC address swap, the PAD 112 calls an NDIS request function to update the handle and pointer of the change and hence reloads an offloaded connection. Office Action, pp. 4-5.

Respectfully, the Examiner's reasoning is incorrect on multiple counts. First, the Examiner's assertion that the PAD 112 calls the NDIS function and "reloads an offloaded connection" "as a result of the MAC address swap" is incorrect. The NDIS function is not called as a result of the MAC address swap; the NDIS function is the means by which the MAC address swap occurs at all. Col. 7, ll. 10-14 ("[PAD] 112 causes NID 103 to change the MAC addresses [of the ports] . . . [PAD] 112 does this by calling a Microsoft operating system function, called the NDIS request function.").

Second, the Examiner's assertion that the MAC addresses are swapped as a result of port 2 being designated a primary port also is incorrect. Burns does not appear to teach any such cause-and-effect relationship. Instead, Burns merely teaches that "[i]n addition to changing the primary team member, [PAD] 112 also swaps the MAC addresses of the two ports . . ." Col. 7, ll. 1-3.

Perhaps most significantly, Applicants note that the Examiner provides absolutely no reference to any teaching or suggestion in Burns that anything should happen as a result of receiving on port 2 a packet that is associated with port 1. The Examiner does make a cursory reference to the fact that "packets

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originally destined to port 1 are received at port 2,” Office Action, p. 5, but fails to show where Burns teaches or even suggests the limitation in question.

Because – as the Examiner admits – Congdon fails to teach the limitation in question, and because Burns fails to satisfy Congdon’s deficiencies, Applicants respectfully submit that the combination of Congdon and Burns fails to teach the limitation in question. Applicants note that the Examiner has repeatedly attempted to reject the claims using Congdon and Burns, and that Applicants have already filed multiple appeal briefs in an attempt to dismiss one or more of these references. Applicants very respectfully ask the Examiner to recognize the fact that Congdon and Burns simply do not teach or even suggest all claim limitations and to kindly refrain from using these references in future Office Actions, if any.

Based on the foregoing, claims 1-7 are allowable over the combination of Congdon and Burns.

Independent claim 8 requires a similar limitation: “reloading the connection in response to the packet associated with the connection being offloaded and received by a network interface not currently processing the offloaded connection.” As explained above, the combination of Congdon and Burns fails to teach such a limitation. Thus, claims 8-11 are allowable over the combination of Congdon and Burns.

Independent claim 12 requires a similar limitation: “reloading the connection as a result of the packet associated with the connection being offloaded and received by a network interface not currently processing the offloaded connection.” As explained above, the combination of Congdon and Burns fails to teach such a limitation. Thus, claims 12-15 are allowable over the combination of Congdon and Burns.

Independent claim 16 requires a similar limitation:

wherein a program executed by the means for reading and executing programs reloads an offloaded connection established by the first means for sending and receiving data onto the second means for sending and receiving data in response to one of a plurality of

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packets associated with the offloaded connection being received on the second means for sending and receiving data.

As explained above, the combination of Congdon and Burns fails to teach such a limitation. Thus, claims 16-21 are allowable over the combination of Congdon and Burns.

II. REJECTION USING CONGDON, BURNS AND MAHALINGHAM

The Examiner rejected dependent claim 5 by combining Congdon, Burns and Mahalingham. However, claim 5 depends from claim 1 and thus is patentable over the combination of Congdon and Burns, as explained above, and Mahalingham fails to satisfy the deficiencies of that combination. Thus, claim 5 is allowable over the combination of Congdon, Burns and Mahalingham.

III. CONCLUSION

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

Applicants respectfully request reconsideration and that a timely Notice of Allowance be issued in this case. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including

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fees for net addition of claims) are hereby authorized to be charged to Hewlett-Packard Development Company's Deposit Account No. 08-2025.

Respectfully submitted,

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